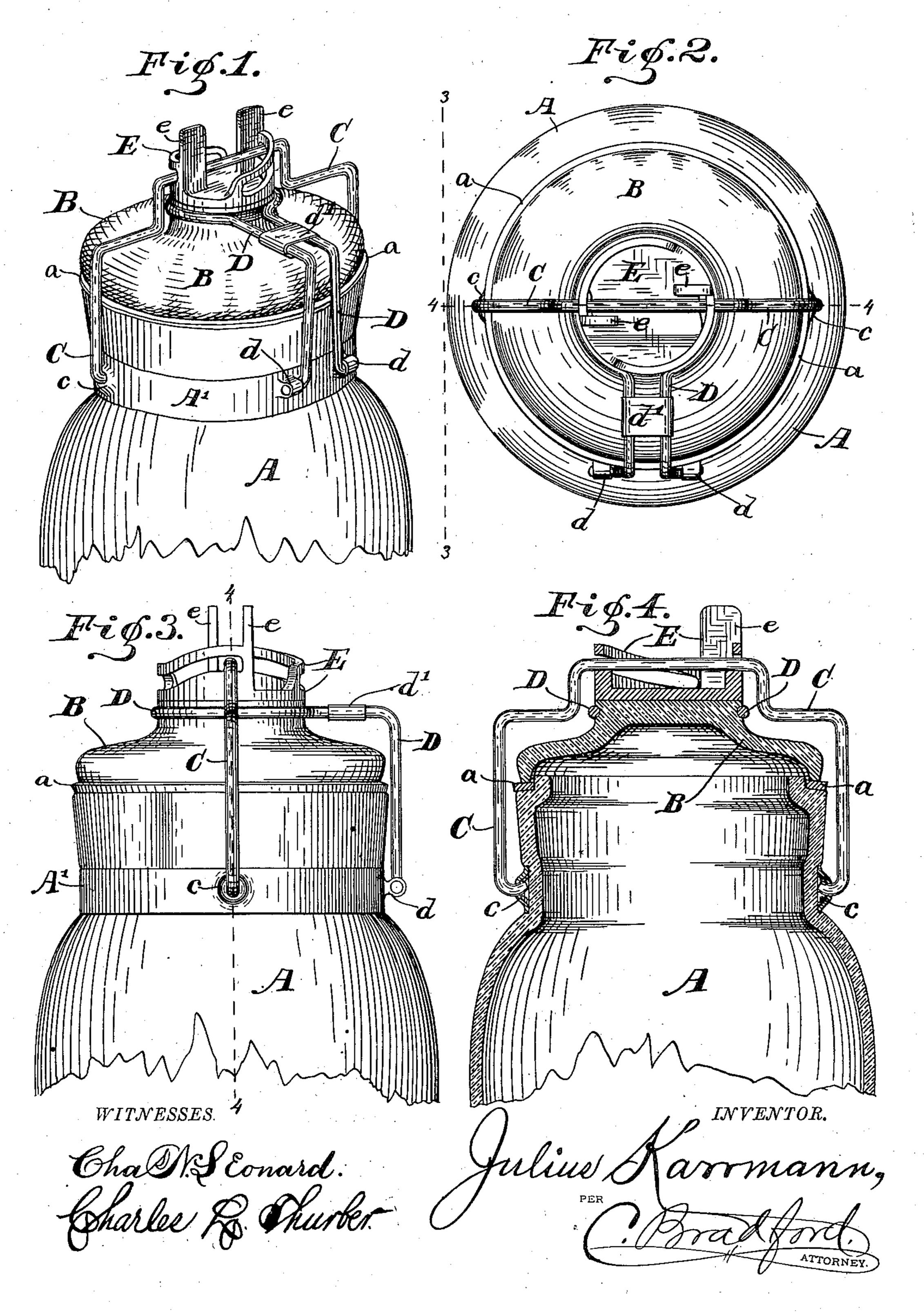
(No Model.)

J. KARRMANN.

COVER FASTENING FOR VESSELS.

No. 376,036.

Patented Jan. 3, 1888.



United States Patent Office.

JULIUS KARRMANN, OF INDIANAPOLIS, INDIANA, ASSIGNOR OF ONE-HALF TO LOUIS HOLLWEG, OF SAME PLACE.

COVER-FASTENING FOR VESSELS.

SPECIFICATION forming part of Letters Patent No. 376,036, dated January 3, 1888.

Application filed July 30, 1887. Serial No. 245,689. (No model.)

To all whom it may concern:

Be it known that I, Julius Karrmann, of the city of Indianapolis, county of Marion, and State of Indiana, have invented certain new and useful Improvements in Cover-Fastenings for Vessels, of which the following is a specification.

My invention relates to that class of vessels (principally fruit-jars) in which the cover is adapted to be so fastened upon the body of the vessel as to make an air-tight joint; and it consists in certain devices whereby this may be accomplished, and whereby the cover may be held upon the vessel as well when it is removed from the opening therein as when it is secured

over said opening.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a perspective view of the upper end of a fruit-jar and the cover thereon, together with the devices embodying my invention; Fig. 2, a top or plan view of the same; Fig. 3, a side elevation thereof, and Fig. 25 4 a transverse vertical section on the dotted line 4 4.

In said drawings, the portions marked A represent the body of the vessel; B, the cover; C, the bail extending over said cover and by which it is held in position; D, the hinge carrying the cover, and E the cam by which the

cover is forced firmly onto its seat.

The vessel A is shown as a fruit-jar of an ordinary and well-known construction. It is provided with a band, A', around its neck, to which the fastening devices are secured in a well-known manner, and with a ring, a, of rubber or other yielding substance, with which the cover comes in immediate contact. The band A'-has the usual ears, c, into which the bail C enters, and also ears d for the hinge D.

The cover B is in general of an ordinary form. Its central portion, however, extends up somewhat higher than usual, and around this central projecting portion is formed a groove, as shown, to receive the wire forming the hinge thereto, as will be presently described. When in position on the vessel, it is held firmly against the ring a thereon, thus making the vessel air-tight, as will also be presently described.

The bail C is preferably formed of heavy wire, the ends of which are inserted in the bearings c in the band A'. Its form is preferably that shown most plainly in Fig. 4, the 55 shoulders provided by that formation preventing the cam E from slipping too far to one side. As shown, it passes up over the cover B, and is the means whereby said cover is held in position over the opening of the vessel. 60

I do not desire to confine myself to the band A' or ears c as a means of connecting this bail to the vessel, as other means—such, for instance, as forming the ends of the bail to engage directly with a shoulder on the vessel— 65 are entirely practicable, and in some construc-

tions may even be preferred.

The hinge D consists of a wire bent around the upwardly-projecting portion of the cover B into the groove therein and extends out to 70 one side of the jar and down to the level of the band A', where its ends are bent to enter the ears d on said band, as shown. It is preferably provided with a clip, d', which holds it in engagement with the groove on the cover. 75 The lower ends are preferably turned outwardly, as shown, and thus are held into engagement with the ears d by their inherent spring force. They can also be conveniently disengaged by simply springing the lower ends 80 toward each other, and then by removing the clip d' the hinge can be altogether removed from the cover:

The cam Eisacircular structure seated upon the top of the cover B and adapted to be re- 85 volved in a horizontal plane thereon. It has two inclined cam-surfaces around its edge, which are adapted, when it is turned into the position shown in the drawings, to wedge between the bail C and the cover, thus forcing 30 said cover tightly down onto its seat. It is provided with ears e, by which it may be conveniently revolved. When revolved in the reverse direction, it is raised up from contact with the cover B, and may then, together with 95 the bail C, be swung to one side, while the cover itself, by means of its hinge B, may be swung to the other side, and thus, although the vessel is completely opened, both the cover and the fastening devices therefor remain at- 100 tached thereto, ready to be at once raised to position. For this reason the cam-surfaces are

practically cam slots, as shown, that portion above the bail C, however, serving simply to prevent the cam from dropping off said bail when swung to one side, as will be readily understood.

Having thus fully described my said invention, what claim as new, and desire to secure by

Letters Patent, is—

1. The combination, with a vessel, of a cover to hinged thereto, a bail attached to said vessel and adapted to swing over said cover when in place, and a cam mounted on said bail and arranged to bear against said cover, said bail being distinct from the hinge carrying the cover,

15 substantially as set forth.

2. The combination, with a fruit-jar or other vessel and its cover, of the bail hinged to a band surrounding the neck of the vessel and extending over the cover, and a horizontally-20 revoluble cam on said bail, the cam-surfaces being in the form of slots, through which said bail passes, whereby said cam will remain attached to said bail, although removed from position on the cover, substantially as set forth.

3. The combination of a vessel, its cover, a bail passing over said cover, a cam between said bail and cover for holding said cover in position, and a hinge securing said cover to

said vessel, said hinge being in the form of a wire passing around an upward projection on the top of said cover, said projection being provided with a groove to receive said wire, substantially as shown and described.

4. The combination of a vessel, its cover provided with a circumferential groove around 35 an upwardly-projecting portion, and a hinge consisting of a wire passing around and entering said groove and held in position by a clip, d', substantially as shown and described.

5. The combination of a vessel, its cover, 40 said cover having an upward projection provided with a groove, and a hinge consisting of a wire passing around and entering said groove and extending down and entering ears d on the band on the vessel, the lower ends of the 45 wire forming the hinge being turned outwardly, and being thus held into said ears by the spring force of said wire, substantially as set forth.

In witness whereof I have hereunto set my 50 hand and seal, at Indianapolis, Indiana, this 26th day of July, A. D. 1887.

JULIUS KARRMANN. [L. S.]

In presence of— C. Bradford, John S. McCullough.